

WHAT IS CLAIMED IS:

- 1 1. A method comprising:
 - 2 in response, at least in part, to a request for a service from a system,
 - 3 determining a quality of service to assign to an application to be
 - 4 executed by the system to provide the service, the quality of service
 - 5 based, at least in part, on one or more service characteristics of the
 - 6 application; and
 - 7 allocating one or more resources to the application, the one or more
 - 8 resources being based, at least in part, on the quality of service.
- 1 2. The method of claim 1, wherein the system comprises a modified
- 2 intelligent media center (MIMC), and said determining a quality of service
- 3 to assign to an application to be executed by the system to provide the
- 4 service comprises determining a quality of service to assign to a
- 5 multimedia application to be executed by the MIMC to provide the service.
- 1 3. The method of claim 2, wherein said determining the quality of service to
- 2 assign to the multimedia application comprises assigning one or more
- 3 QoS (quality of service) parameters to the application, the QoS
- 4 parameters being based on a class of service associated with the one or
- 5 more service characteristics of the multimedia application.
- 1 4. The method of claim 3, wherein the multimedia application is a wireless
- 2 application, and the one or more QoS parameters comprise at least one

3 of:

4 AIFS (arbitration inter-frame space);

5 CW_{min} (minimum contention window);

6 CW_{max} (maximum contention window); and

7 PF (persistence factor).

1 5. The method of claim 3, wherein said determining the quality of service to
2 assign to the multimedia application additionally comprises determining a
3 size of packets to be used for transmitting data associated with the
4 multimedia application from the system to a client.

1 6. The method of claim 5, wherein said determining the size of packets
2 comprises determining a size of an MSDU (MAC – media access layer –
3 service data unit) based, at least in part, on at least one of the one or
4 more service characteristics.

1 7. The method of claim 6, wherein said determining the size of the data
2 packets additionally comprises determining the size of the MSDU based,
3 at least in part, on a priority associated with the class of service.

1 8. The method of claim 1, wherein said allocating the one or more resources
2 to the application based, at least in part, on the quality of service
3 comprises assigning at least one of:
4 a processing throughput;

5 a queue length; and

6 memory buffer size.

1 9. The method of claim 1, additionally comprising:

2 queuing the application for servicing; and

3 scheduling the application for servicing.

1 10. An apparatus comprising:

2 circuitry capable of:

3 in response, at least in part, to a request for a service from a system,

4 determining a quality of service to assign to an application to be

5 executed by the system to provide the service, the quality of service

6 based, at least in part, on one or more service characteristics of the

7 application; and

8 allocating one or more resources to the application, the one or more

9 resources based, at least in part, on the quality of service.

1 11. The apparatus of claim 10, wherein the system comprises a modified

2 intelligent media center (MIMC), and the circuitry that is capable of

3 determining a quality of service to assign to an application to be executed

4 by the system to provide the service is capable of determining a quality of

5 service to assign to a multimedia application to be executed by the MIMC
6 to provide the service.

1 12. The apparatus of claim 11, wherein said circuitry capable of determining
2 the quality of service to assign to the multimedia application is also
3 capable of assigning one or more QoS (quality of service) parameters to
4 the multimedia application.

1 13. The apparatus of claim 12, wherein the multimedia application is a
2 wireless application, and the one or more QoS parameters comprise at
3 least one of:

4 AIFS (arbitration inter-frame space);
5 CW_{min} (minimum contention window);
6 CW_{max} (maximum contention window); and
7 PF (persistence factor).

1 14. The apparatus of claim 12, wherein said circuitry capable of determining
2 the quality of service to assign to the multimedia application is also
3 capable of determining a size of packets to be used for transmitting data
4 associated with the multimedia application from the system to a client.

1 15. The apparatus of claim 10, wherein said circuitry capable of allocating the
2 one or more resources to the application based, at least in part, on the
3 quality of service is also capable of assigning at least one of:

4 a processing throughput;

5 a queue length; and

6 memory buffer size.

1 16. The apparatus of claim 10, additionally said circuitry additionally capable
2 of:

3 queuing the application for servicing; and

4 scheduling the application for servicing.

1 17. A system comprising:

2 one or more applications to be executed to provide one or more services
3 to one or more clients;

4 one or more resources to support the execution of the one or more
5 applications;

6 a wireless network interface card to receive from the one or more clients,
7 one or more requests for a service; and

8 circuitry communicatively coupled to the wireless network interface card,
9 and capable of:

10 in response, at least in part, to a request for a service, determining
11 a quality of service to assign to one of the applications to
12 provide one of the one or more services, the quality of

1 18. The system of claim 17, wherein the system comprises a modified
2 intelligent media center (MIMC), and the circuitry that is capable of
3 determining a quality of service to assign to an application to be executed
4 by the system to provide the service is capable of determining a quality of
5 service to assign to a multimedia application to be executed by the MIMC
6 to provide the service.

1 19. The system of claim 18, wherein said circuitry capable of determining the
2 quality of service to assign to the multimedia application is also capable of
3 assigning one or more QoS (quality of service) parameters to the
4 multimedia application.

1 20. The system of claim 19, wherein said circuitry capable of determining the
2 quality of service to assign to the multimedia application is also capable of
3 determining a size of packets to be used for transmitting data associated
4 with the multimedia application from the system to the client.

1 21. The system of claim 17, wherein said circuitry capable of allocating the
2 one or more resources to the multimedia application based, at least in
3 part, on the quality of service is also capable of assigning at least one of:

4 a processing throughput;

5 a queue length; and

6 memory buffer size.

1 22. The system of claim 17, additionally said circuitry additionally capable of:

2 queuing the application for servicing; and

3 scheduling the application for servicing.

1 23. The system as in claim 17, wherein said circuitry is capable of operating in
2 a bearer plane of a communications environment.

1 24. A machine-readable medium having stored thereon instructions, the
2 instructions when executed by a machine, result in the following:

3 in response, at least in part, to a request for a service from a system,
4 determining a quality of service to assign to an application to be
5 executed by the system to provide the service, the quality of service
6 based, at least in part, on one or more service characteristics of the
7 application; and

8 allocating one or more resources to the application, the one or more
9 resources based, at least in part, on the quality of service.

1 25. The machine-readable medium of claim 24, wherein the system comprises
2 a modified intelligent media center (MIMC), and said instructions that
3 result in determining a quality of service to assign to the application result

4 in determining a quality of service to assign to a multimedia application to
5 be executed by the MIMC to provide the service.

1 26. The machine-readable medium of claim 25, wherein said instructions that
2 result in determining the quality of service to assign to the multimedia
3 application result in assigning one or more QoS (quality of service)
4 parameters to the multimedia application.

1 27. The machine-readable medium of claim 26, wherein the multimedia
2 application is a wireless application, and the one or more QoS parameters
3 comprise at least one of:

4 AIFS (arbitration inter-frame space);
5 CW_{min} (minimum contention window);
6 CW_{max} (maximum contention window); and
7 PF (persistence factor).

1 28. The machine-readable medium of claim 26, wherein said instructions,
2 when executed by a machine, that result in determining the quality of
3 service to assign to the multimedia application additionally result in
4 determining a size of packets to be used for transmitting data associated
5 with the multimedia application from the system to a client.

1 29. The machine-readable medium of claim 24, wherein said instructions,
2 when executed by a machine, result in allocating the one or more
3 resources to the application based, at least in part, on the quality of

4 service additionally result in assigning at least one of:

5 a processing throughput;

6 a queue length; and

7 memory buffer size.

1 30. The machine-readable medium of claim 24, said instructions, when

2 executed by a machine, additionally result in:

3 queuing the application for servicing; and

4 scheduling the application for servicing.